

# OPTIMER™ 83949

## Mineral Processing Flocculant

**NALCO**  
An Ecolab Company

Product Bulletin

### PRODUCT DESCRIPTION AND APPLICATION

**OPTIMER 83949** is a high molecular weight, moderately anionic dry flocculant offering superior performance in mineral processing.

**OPTIMER 83949** is designed for refuse and mineral concentrate thickening and dewatering; and clarification of process water, pregnant liquor or recycle water. This product functions well with all types of liquid/solid separation equipment including clarifiers, thickeners, twin-belt, screw and plate- and-frame presses, and vacuum filters. It also provides:

- High solids settling rates
- Superior overflow clarities
- Maximum underflow compaction and pumpability

**OPTIMER 83949** is formulated to provide the following handling advantages:

- Rapid dissolution
- No "fish eyes"
- Dust-free handling

### PHYSICAL & CHEMICAL PROPERTIES

These properties are typical. Refer to the Safety Data Sheet (SDS) for the most current data.

<b>Form:</b>	Powder
<b>Color:</b>	White
<b>Odor:</b>	Slight
<b>Bulk Density:</b>	45.3 lb/ft <sup>3</sup> (0.72 gm/cc)
<b>Solubility in Water:</b>	Complete
<b>pH (0.3%):</b>	7.4
<b>Viscosity @ 70°F (21°C) (0.3%):</b>	960 cp

### ACTIVE CONSTITUENTS

Dry Anionic Flocculant

### REGULATORY APPROVALS

Refer to the Material Regulatory Certifications (RCR) document for the most recent information on approvals.

## MATERIALS OF COMPATIBILITY

Compatible	Not Compatible
304 Stainless Steel	Mild Steel
316 Stainless Steel	Aluminum
Nickel	Brass
Plasite 6000	Nickel
Plasite 4005	Galvanized
Plasite 7122	Neoprene
Polyethylene	Vinyl
PVC	Polyurethane
Viton® synthetic rubber	
Fluoropolymer	
Buna-N	
Hypalon® elastomer	
Polypropylene	

## DOSAGE AND FEEDING

Each application is unique. Testing products with different charges and molecular weights is highly recommended for proper program selection.

After make-up and proper aging, a further dilution of the sample may be necessary for laboratory testing in order to gain adequate dispersion, and minimize adherence to testing equipment.

Dosage requirements vary depending upon overall effects desired and the total percent solids in the slurry. Typical ranges for mineral processing applications are:

- Low solids slurry thickening and clarification      0.00006 - 0.2 lb/ton of dry solids (0.03 - 10 g/MTon of dry solids)
- Heavy slurry dewatering      0.03 - 2.0 lb/ton of dry solids (15 - 100 g/MTon of dry solids)

Your Nalco sales engineer can help you develop the most effective feeding method for your operation.

## ENVIRONMENTAL AND TOXICITY DATA

Refer to the Safety Data Sheet (SDS) for the most current data.

## SAFETY AND HANDLING

Read of the Safety Data Sheet (SDS) for specific personal protective equipment (PPE) recommendations and for health effects information. Do not get in eyes, on skin, or on clothing. Do not take internally. Ensure all containers are labeled. For spills of dry product, sweep up. Do not use water to clean up. A very slippery gel will form that is difficult to remove.

Floor can be slippery if polymer is on the floor and contacts water.

## STORAGE

**OPTIMER 83949** has a 24-month shelf life in unopened containers if stored in a low moisture, room temperature environment. Store separately from oxidizers. Keep in dry place. Store at temperatures below 95°F (35°C). Refer to the Safety Data Sheet (SDS) for the most current data.

## REMARKS

If you need assistance or more information on this product, please call your nearest Nalco representative.

For more news about Nalco, an Ecolab company, visit our website [www.nalco.ecolab.com](http://www.nalco.ecolab.com)

For **Medical and Transportation Emergencies** involving Nalco products, please see the Safety Data Sheet for the phone number.

## ADDITIONAL INFORMATION

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